



# Arkansas Department of Health

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New  
March 27, 2020

## Do Homemade Face Masks Help?

As the COVID-19 pandemic progresses all over the world and personal protective equipment (PPE) is in increasingly short supply, people are seeking ways to protect themselves and also to support health care workers as they serve on the “front lines” of battle against this highly contagious pathogen. There are now many patterns on the internet for creating home made cloth masks. But do masks help? What is their utility and what are their limitations? This guidance document seeks to answer some of those questions, based on a review of the scientific literature.

In order to answer these questions, we need to look at how the SARS-CoV-2 virus (which causes COVID-19 infection) is transmitted from one person to another. We still have much to learn, but there is good evidence that it is transmitted by aerosols (microscopic droplets floating in the air) and by respiratory droplets, which are produced when people cough or sneeze and are heavy enough to fall out of the air onto surfaces. If infected with SARS-CoV-2, these secretions can contaminate an infected person’s hands and surfaces and can persist on certain surface materials for over 2 weeks. Touching a contaminated surface with your hand and then touching your eyes, nose or mouth can transfer the virus to a port of entry into your body. This is the reason that frequent and effective hand hygiene is your first line of defense against infection.

But what about virus particles in the air? We all produce very tiny particles when we breathe normally, even when we are healthy or feel well. We now know that people who are infected with SARS-CoV-2 can be infectious to other people even before they develop symptoms themselves. This is because this pathogen is a very small organism and it replicates first in the upper respiratory tract. It is small enough to float in the tiny respiratory particles that we normally produce as we breathe. At this time, it appears that spread of COVID-19 by people who have no symptoms is an uncommon event. However, new information is emerging constantly, and the recommendations about mask use may change.

**So will wearing a mask protect you?** That depends. N95 medical masks are manufactured to filter out such tiny particles, but they have to be fit-tested to the wearer’s face. If the fit is poor, the mask is not protective. **Surgical masks do not fit the face well. They are primarily designed to protect the environment from the wearer by containing respiratory droplets and keeping them from contaminating surgical fields or sterile surfaces.**

**So where do homemade cloth masks fit in?** Unfortunately, there have been very few research studies to assess this, and the available studies do little to compare the efficacy of different materials. It is clear that cloth masks are far less protective to the wearer than N95 masks and even fall short of surgical masks, though they are closer in comparison to these. But there are a few studies that suggest that they **may** offer the wearer a **little** protection.

**What wearing a cloth or surgical mask will do for you:**

- Keep you from touching your nose and mouth and getting infected from germs on your hands (but remember not to touch your eyes either!)
- Protect your nose and mouth from large infected respiratory droplets from other people's cough or sneeze
- If you're sick, it will keep you from coughing or sneezing infected respiratory droplets onto your hands or onto surfaces that others may touch later

**What wearing a cloth or surgical mask will NOT do for you:**

- Keep you from inhaling or spreading germs in the tiny aerosol particles that we all breathe out in the course of normal breathing

**Remember, social distancing and good and frequent hand washing/sanitizing is your #1 line of defense against COVID-19!**

There are now many patterns for creating cloth masks on the internet. If you want to make yourself a mask, we suggest choosing a design that has several layers of fabric and choosing fabric with a tight weave. You can find a pattern [here](#).